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Serial Communications Protocol for the HIQ-SLIM Series

I. INTRODUCTION

The SLIM series use the standard Precision Instrument communication protocol. The starting character is S followed by the address. The default address is 01. The command follows and must be terminated by a carriage return, line feed sequence <CRLF>.

There are two command sets for SLIMS:

1. Commands common to all SLIMs.
2. Commands only used in SLIMs configured as REMOTE displays.

II. COMMON COMMANDS

COMMAND	DESCRIPTION	RANGE	EXAMPLE
ADDRn	Changes the address. Default is 01	n = 0 to 10 ascii characters	S01ADDR02<CRLF>
BAUDnn	Changes the baud rate Default is 9600	nn = 12 -> 1200 baud. nn = 24 -> 2400 nn = 48 -> 4800 nn = 96 -> 9600	S01BAUD2400<CRLF>
CONFn	Change the SLIM configuration. The value for n is additive. Default config is 5. Not Applicable to SLIM3 series	n = (return). Returns current config . 1 = enables measurements 2 = enables serial output of measurements 4 = enables echo of serial inputs	S01CONF<CRLF> Shows current configuration. S01CONF2<CRLF> equivalent to SEND forever
INTn	Change display Intensity. There are four levels. Default is 9.	n = 0 off n = 1 to 3 dim n = 4 to 6 medium n = 7 to 9 brightest	S01INT0<CRLF> display off S01INT9<CRLF> display max
PTn	Light decimal point position . Default is 0.	n = 0 no decimals on n = 1 to number of decimals in display.	S01PT1<CRLF> 1st decimal point on.
RST	Resets SLIM to user values held in EEPROM	N/A	S01RST<CRLF>
RST/C	Resets SLIM to default values held in EPROM	N/A	S01RST/C<CRLF>
SENDnnn	Sends nnn readings over serial port to host.	n = 1 to 255	S01SEND5 <CRLF> send 5 readings
STOP	Stops serial transmission of readings	N/A	S01STOP<CRLF>
WRITE	Saves configuration data to EEPROM. Data saved includes: ADDR, BAUD, CONF, FLASH and INT	N/A	S01WRITE<CRLF>

III. REMOTE DISPLAY COMMANDS

COMMAND	DESCRIPTION	RANGE	
BR.nn	Lights nn % of LEDS in bar graph from the bottom of the bar graph.	nn = 0 to 100	S01BR.50<CRLF> bottom 50% of bars lit.
BR*	Lights nn % of LEDS in bar graph from the top of the bar graph.	nn = 0 to 100	S01BR*10<CRLF> top 10% of bars lit.
Dnn	Displays ascii characters on 7 segment displays.	nn = ascii chars.	S01D12<CRLF> display shows 12 S01D89<CRLF>
FLASHn	Flashes all displays	n = 0 to 1 no flashing n = 2 to 3 slowest (1.14 S) n = 4 to 5 slow n = 6 to 7 medium n = 8 to 9 fastest (142 mS)	S01FLASH0<CRLF> S01FLASH3<CRLF>